## **CLAIMS**

## WHAT IS CLAIMED IS:

1. A thread wear gauge for gauging when a coil thread having a nominal new thread profile has been worn beyond safe limits, said nominal new thread profile providing said coil thread with a shear load bearing area, said thread wear gauge comprising:

a gauging thread, said gauging thread being adapted to threadably engage said coil thread wherein at least enough of said shear load bearing area has worn away to render said coil thread unsafe for continued use, said gauging thread adapted to being unable to threadably engage with said coil thread when said coil thread is safe for continued use.

- 2. A thread wear gauge of claim 1 wherein said coil thread is an internal thread.
- 3. A thread wear gauge of claim 1 wherein said coil thread is an external thread.
- 4. A thread wear gauge of claim 1 wherein said coil thread is internal and said nominal new thread profile is convex.
- 5. A thread wear gauge of claim 1 wherein said coil thread is internal and said nominal new thread profile is concave.

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- 6. A thread wear gauge of claim 1 wherein said gauging thread being adapted to threadably engage said coil thread wherein at least approximately 30 percent of said shear load bearing area has been worn away to render said coil thread unsafe for continued use.
- 7. A thread wear gauge of claim 1 wherein said gauging thread being adapted to threadably engage said coil thread wherein at least approximately 50 percent of said shear load bearing area has been worn away to render said coil thread unsafe for continued use.

8. A method for gauging when a coil thread having a nominal new thread profile has been worn beyond safe limits using a thread wear gauge, said nominal new thread profile providing said coil thread with a load bearing area, said method comprising:

selecting a thread wear gauge having a gauging thread, said gauging thread being adapted to threadably engage said coil thread wherein at least approximately half of said normally load bearing area has worn away, and said gauging thread adapted to being unable to threadably engage with said coil thread when less than approximately half of said load bearing area has been worn away;

attempting to threadably engage said gauging thread with said coil thread; observing whether said gauging thread can be threadably engaged with said coil thread; and

discontinuing the use of said coil thread if said gauging thread can be threadably engaged with said coil thread.

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9. A thread wear gauge for gauging when a coil thread having a nominal new thread profile has been worn beyond safe limits, said nominal new thread profile providing said coil thread with a shear load bearing area, said thread wear gauge comprising:

a gauging thread, said gauging thread being adapted to threadably engage said coil thread wherein at least approximately half of said shear load bearing area has worn away, said gauging thread adapted to being unable to threadably engage with said coil thread when less than approximately half of said shear load bearing area has been worn away.